



(11) **EP 1 107 504 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention  
of the grant of the patent:  
**21.03.2007 Bulletin 2007/12**

(51) Int Cl.:  
**H04L 9/08<sup>(2006.01)</sup>**

(21) Application number: **00480089.2**

(22) Date of filing: **28.09.2000**

(54) **Method of updating encryption keys in a data communication system**

Verfahren zur Aktualisierung von Geheimschlüsseln in einem Datenkommunikationssystem

Procédé de mise à jour de clés de chiffrement dans un système de communication de données

(84) Designated Contracting States:  
**DE FR GB**

(30) Priority: **02.12.1999 EP 99480123**

(43) Date of publication of application:  
**13.06.2001 Bulletin 2001/24**

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(56) References cited:

**EP-A- 1 032 159 WO-A-98/51035**  
**US-A- 4 157 454 US-A- 4 661 657**  
**US-A- 5 995 624**

- **ZIV J ET AL: "COMPRESSION OF INDIVIDUAL SEQUENCES VIA VARIABLE-RATE CODING" IEEE TRANSACTIONS ON INFORMATION THEORY, IEEE INC. NEW YORK, US, vol. IT-24, no. 5, September 1978 (1978-09), pages 530-536, XP000565213 ISSN: 0018-9448**
- **SCHNEIER: "Applied Cryptography, Second Edition" 1996, JOHN WILEY & SONS, NEW YORK XP002249710 \* page 180, line 23 - line 34 \***
- **TAKAYA YAMAZATO; IWAO SASASE; SHINSAKU MORI: 'INTERLACE CODING SYSTEM INVOLVING DATA COMPRESSION CODE, DATA ENCRYPTION CODE AND ERROR CORRECTING CODE' IEICE TRANSACTIONS ON COMMUNICATIONS vol. E75-B, no. 6, 01 June 1992, COMMUNICATIONS SOCIETY, TOKYO, JP, pages 458 - 465, XP000310869**
- **PATENT ABSTRACTS OF JAPAN vol.018, no.230 (E-1542) 26 April 1994 & JP 06 021 854 A (MATSUSHITA ELECTRIC IND CO LTD) 28 January 1994**
- **PATENT ABSTRACTS OF JAPAN vol.010, no.244 (E-430) 22 August 1986 & JP 61 073 445 A (NEC CORP) 15 April 1986**
- **PATENT ABSTRACTS OF JAPAN vol.010, no.046 (E-383) 22 February 1986 & JP 60 200 628 A (FUJITSU LTD) 11 October 1985**

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